

We claim:

1. An apparatus for automatic cutting of organs from a plucks set from a carcass by means of cutting means, said plucks set comprising larynx, gullet and windpipe, lungs and heart, said apparatus comprising a suspension means for holding the pipes; moving means for moving the plucks set relative to the cutting means, while the pipes are held in the suspension means; and a guiding means adapted to guide the plucks set relative to the cutting means and to keep lungs and heart separated from each other.

2. An apparatus according to claim 1, wherein the guiding means is divided in two parts and has an upper side, on which the lungs may rest, and a slit between the two parts having such a width that a connection of the heart to a rest of the plucks set may extend through the slit, passage of the lungs being not allowed.

3. An apparatus according to claim 2, wherein at the two parts of the guiding means, members are provided which force the lungs outwards and away from the slit between the two parts.

4. An apparatus according to claim 2, wherein a cutting means is provided at the upper side of the guiding means on either side of the slit between the two parts of the guiding means, and a third cutting means is provided at the slit below or above the slit.

5. An apparatus according to claim 1, comprising before of the guiding means a separation device for separating heart and lungs.

6. An apparatus according to claim 5, wherein the separation device comprises a flat engagement means extending upwards.

7. An apparatus according to claim 6, wherein

the engagement means in a first position stands up relative to horizontal under an angle of at least 45°, preferably at least 60°, more preferred 80-90°, and that the engagement means in a second position lies down under an angle of at the most 30°, preferably at the most 20°, more preferred 0-15°.

8. An apparatus according to claim 5, wherein the separation device comprises a bed with a recess allowing the heart to pass through it.

9. An apparatus according to claim 8, wherein the bed comprises resilient means having such a rigidity and density that they bend aside under the weight of the heart, but are able to carry the lungs.

10. An apparatus according to claim 9, wherein the resilient means are arranged along an edge of the recess.

11. An apparatus according to claim 5, wherein the separation device is movable between a receiving position and a supplying position, the separation device being, when in the supplying position, positioned close to the guiding means.

12. An apparatus according to claim 1, comprising an orientation device adapted to orientate the plucks set, to give the heart a predetermined orientation.

13. An apparatus according to claim 12, wherein the orientation device comprises means for detecting an orientation of the larynx in a horizontal plane and means for turning the larynx to a predetermined orientation, if that predetermined orientation is not detected at the detection.

14. An apparatus according to claim 1, wherein the suspension means comprises two suspension members spaced mutually to such a degree that the pipes, but not the larynx can pass between them.

15. An apparatus according to claim 14, wherein the suspension members extend substantially through the entire apparatus.

16. An apparatus according to claim 14, wherein the moving means comprise a pusher adapted for movement along the suspension members.

17. An apparatus according to claim 1, wherein a buffer device is positioned before the cutting means, preferably before the separation device, more preferred before the orientation device.

18. A method for automatic cutting of organs from a plucks set from a carcass by means of cutting means, said plucks set comprising larynx, gullet and windpipe, lungs and heart, wherein the plucks set is suspended in a suspension means holding the pipes; the plucks set is moved relative to the cutting means, while the pipes are held in the suspension means; the plucks set is guided relative to the cutting means, the lungs and the heart being kept separated from each other, following which the lungs and the heart are cut from a remaining part of the plucks set by means of the cutting means.

19. A method according to claim 18, wherein a connection of the heart to a rest of the plucks set is guided through a slit in a guiding means; the lungs are guided over the guiding means on either side of the slit, whereby the respective connections of the heart and the lungs to the pipes are positioned relative to the cutting means; and the connections thus positioned and the cutting means are moved relative to one another to cut said connections.

20. A method according to claim 18, wherein the heart and the lungs are separated by means of a separation device, a separating engagement means being taken in between the heart and the lungs thereby

separating the heart from the lungs.

21. A method according to claim 18, wherein the heart and the lungs are placed on a bed of resilient means having such a rigidity and density that they bend aside for the heart and let it pass the bed, whereas the lungs are carried by the resilient means on top of the bed, whereby the heart and the lungs are separated.

22. A method according to claim 18, wherein the plucks set is given a definite orientation in a horizontal plane.

23. A method according to claim 18, wherein the plucks set is suspended by introducing the pipes in a space between two suspension members, between which the larynx cannot pass, the upper side of the suspension means being designed in such a manner that the larynx will take up one out of two possible positions in a horizontal plane, and the pipes are advanced with the heart and the lungs hanging below the suspensions members and the larynx in abutment against the upper side of the suspension members.

24. A method according to claim 18, wherein the larynx is taken to a device detecting the orientation of the larynx in a horizontal plane and turning the larynx to a predetermined orientation, if this predetermined orientation is not detected at the detection.